To: Ball, Harold[Ball.Harold@epa.gov]
Cc: Herrera, Angeles[Herrera.Angeles@epa.gov]; Rodriguez, Dante[Rodriguez.Dante@epa.gov]; Seter, David[Seter.David@epa.gov]
From: Manzanilla, Enrique
Sent: Thur 3/10/2016 9:33:36 PM
Subject: Re: Answers to your question [InsideEPA followup]

Excellent!

Sent from my iPhone

On Mar 10, 2016, at 10:06 AM, Ball, Harold <Ball.Harold@epa.gov> wrote:

Dante and I put our heads together on this draft of an explanation:

Acid mine drainage is an unintended consequence of sub-surface mining. When rock and excavated material is exposed to air, acids can be generated naturally. Water percolating through a mine or through tailing piles mixes with the acids, dissolves metals and then drains out into the surface water. At Anaconda it was different in that they purposefully applied sulfuric acid solutions to the heap piles to recover and produce copper. The metal constituents founds in any particular mine reflect the unique composition of the site specific rock, so the chemical characteristics of the drainage would vary by site.

=====

Harold Ball, Chief, NV & Federal Facilities Section (S82), EPA Region 9 Superfund, w) 415.972.3047, c) 415.819.9821, ball.harold@epa.gov

From: Manzanilla, Enrique
Sent: Thursday, March 10, 2016 8:49 AM
To: Ball, Harold <Ball.Harold@epa.gov>; Herrera, Angeles <Herrera.Angeles@epa.gov>
Cc: Rodriguez, Dante <Rodriguez.Dante@epa.gov>; Seter, David <Seter.David@epa.gov>
Subject: RE: Answers to your question [InsideEPA followup]

I guess the follow up question from the reporter would be something like: What is the difference between the chemical constituents of the fluids from the ponds at Anaconda versus acid mine drainage seen in Nevada at other mine sites? Also, might be good to have

one sentence that describes the production of acid mine drainage at other abandoned mines.

Enrique Manzanilla

Director, Superfund Division

US EPA Region 9 - Pacific Southwest

(415) 972 3843

From: Ball, Harold
Sent: Thursday, March 10, 2016 8:25 AM
To: Herrera, Angeles <Herrera.Angeles@epa.gov>
Cc: Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Rodriguez, Dante <Rodriguez.Dante@epa.gov>; Seter, David <Seter.David@epa.gov>
Subject: FW: Answers to your question [InsideEPA followup]

The answer to questions 1 and 3 is basically "No" – Margot has that info already. Here is our proposed answer to question 2:

Q2. *"Also, I see that EPA is concerned about the site's heap leach fluid containment systems. Can you explain what this is in layman's terms? Is this the same thing as acid mine drainage?"*

The problem at Anaconda is not acid mine drainage but heap leach drainage. Heap leaching is an ore extraction process whereby ore is placed in a large pile on top of a pad, then acid is leached through the ore to extract the metals. At Anaconda, there are five heap leach piles with a total footprint of approximately 250 acres. Since the time the operation was abandoned, the acid solutions have continued to drain from the heaps as rainfall percolates through them and mixes with the remaining acid. The resulting acidic fluids have a low pH and contain large quantities of arsenic, cadmium, chromium, copper, and iron. As the fluids are placed into evaporation ponds, the salts precipitating from these fluids fill the ponds. Action is necessary before the ponds fill with salts and lose capacity to contain the fluids. If the ponds were to overflow, there would be a release of fluids that could be contained on-site but would then add to the groundwater contamination beneath the site.

=====

Harold Ball, Chief, NV & Federal Facilities Section (S82), EPA Region 9 Superfund, w) 415.972.3047, c) 415.819.9821, ball.harold@epa.gov

From: Ball, Harold
Sent: Wednesday, March 09, 2016 4:38 PM
To: Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Herrera, Angeles <Herrera.Angeles@epa.gov>
Cc: PerezSullivan, Margot <PerezSullivan.Margot@epa.gov>
Subject: RE: Answers to your question

FYI, I talked separately to Margot (copied here) and to Bill Keener. They are comfortable with their own analysis and info from me on the reporters follow up questions 1 and 3. I have drafted a paragraph on question 2 that I am running past Dante before sharing with Margot tomorrow. Margot said that she is comfortable to wait until the reporter deadline (end of the day tomorrow) to get our answers correct.

=====

Harold Ball, Chief, NV & Federal Facilities Section (S82), EPA Region 9 Superfund, w) 415.972.3047, c) 415.819.9821, ball.harold@epa.gov

From: Manzanilla, Enrique
Sent: Wednesday, March 09, 2016 12:50 PM
To: Herrera, Angeles <Herrera.Angeles@epa.gov>; Ball, Harold <Ball.Harold@epa.gov>
Subject: Fwd: Answers to your question

Sent from my iPhone

Begin forwarded message:

From: "PerezSullivan, Margot" <PerezSullivan.Margot@epa.gov>
Date: March 9, 2016 at 12:24:21 PM PST
To: "Zito, Kelly" <ZITO.KELLY@EPA.GOV>, "Manzanilla, Enrique" <Manzanilla.Enrique@epa.gov>
Subject: Fwd: Answers to your question

Follow up from Inside EPA. Worlds colliding on this one.

The first question would be an unequivocal no. We can explain the leach pond.

Lastly, we have until COB tomorrow to respond.

Margot Perez-Sullivan
U.S. Environmental Protection Agency
D: 415.947.4149

C: 415.412.1115

E: perezsullivan.margot@epa.gov

Begin forwarded message:

From: Suzanne Yohannan <suzanney@iwpnews.com>
Date: March 9, 2016 at 12:21:32 PM PST
To: "PerezSullivan, Margot" <PerezSullivan.Margot@epa.gov>
Subject: Re: Answers to your question

Margot,

I do have a couple follow-up questions. Could you tell me if listing the Anaconda Copper Mine site on the NPL would set any kind of precedent? If so, what kind?

Also, I see that EPA is concerned about the site's heap leach fluid containment systems. Can you explain what this is in layman's terms? Is this the same thing as acid mine drainage?

Is EPA fearful there will be a spill here like the one in 2015 at Gold King Mine?

I'm working under a deadline of tomorrow late afternoon (your time).

Thanks.

Sincerely,
Suzanne Yohannan
Inside EPA
703-562-8759
suzanney@iwpnews.com

From: PerezSullivan, Margot [mailto:PerezSullivan.Margot@epa.gov]
To: suzanney@iwpnews.com [mailto:suzanney@iwpnews.com]
Sent: Tue, 08 Mar 2016 14:25:47 -0500
Subject: Answers to your question

Hi Suzanne, here are answers to your questions. Please let me know if you need any additional information.

EPA Region 9 Regional Administrator, Jared Blumenfeld, and his staff attended several meetings in the Yerington area on March 2. Mr. Blumenfeld met with local agriculture business representatives and city and county officials. The Nevada Division of Environmental Protection was also present at these meetings in Yerington. Mr. Blumenfeld and his staff also met with representatives from the Yerington Community Action Group, the Yerington Paiute Tribe, and the Walker River Paiute Tribe. All parties engaged in a constructive dialogue regarding the possibility of placing the Anaconda Mine Site on the NPL. Mr. Blumenfeld answered a number of questions regarding the proposed listing and clarified some information referenced in his prior correspondence with Governor Sandoval on this issue. Mr. Blumenfeld has requested that Governor Sandoval provide his response to EPA's request for the State's position on NPL listing for the Site by March 29, 2016. EPA is currently awaiting the Governor's response.

The EPA contends listing the site on the NPL will make the Superfund money available for site cleanup when other sources of funding are not available and will allow the project to move forward with remedies

that will ensure containment of mine site contamination and protection of groundwater resources. In addition, the NPL process provides closure and certainty to the local community, property owners and potentially responsible parties.

Margot Perez-Sullivan
U.S. Environmental Protection Agency
D: 415.947.4149

C: 415.412.1115

E: perezsullivan.margot@epa.gov